

# Pribilof Islands Restoration Advisory Board Meeting

**February 13, 2003**

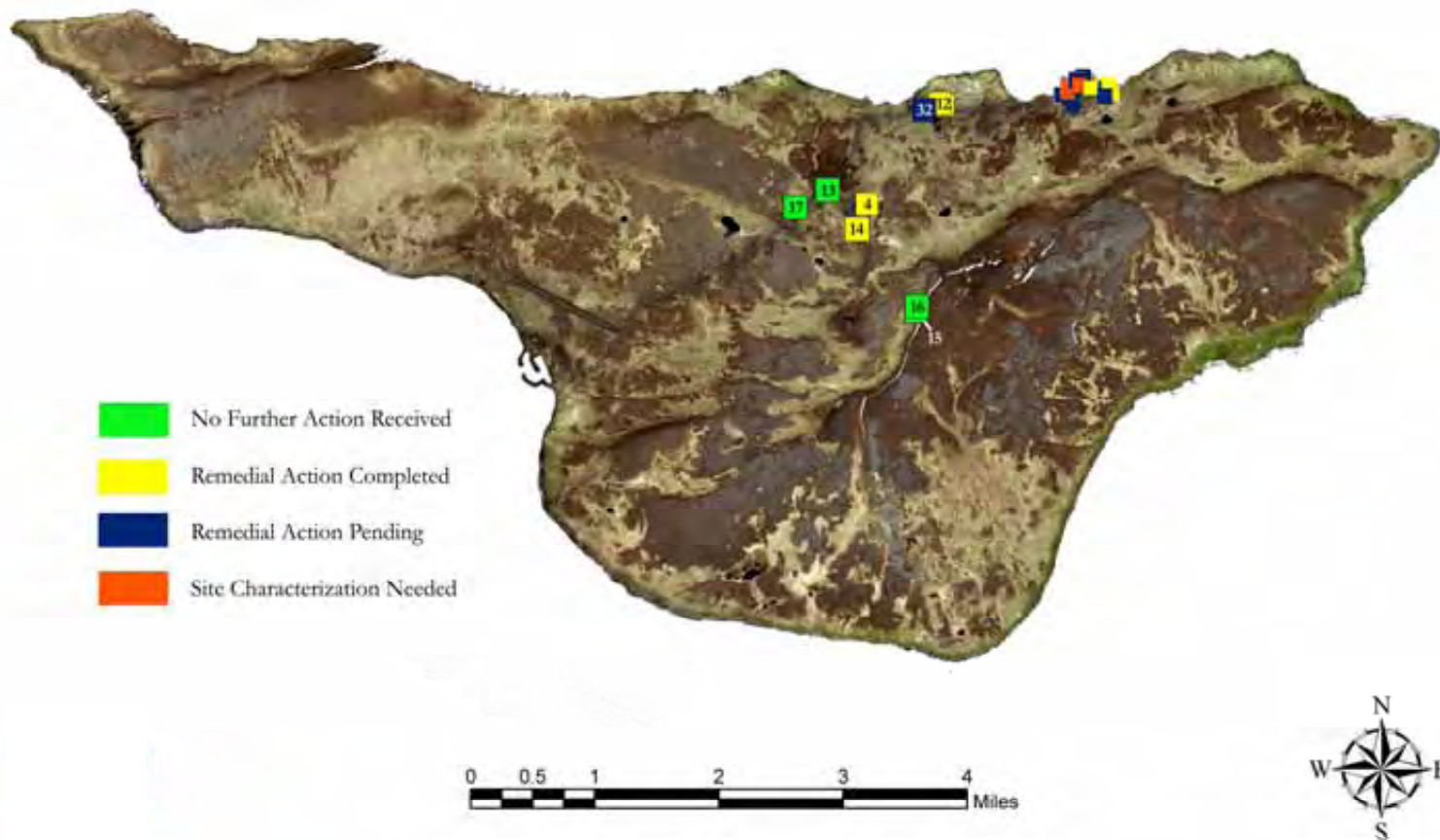
# NOAA's Update on Project Activities

**Pribilof Islands RAB Meeting  
February 13, 2003**

# Project Totals

- **33 Sites on St. George (16 completed to date)**
- **56 Sites on St. Paul (30 completed to date)**

# St. George Island Site Status

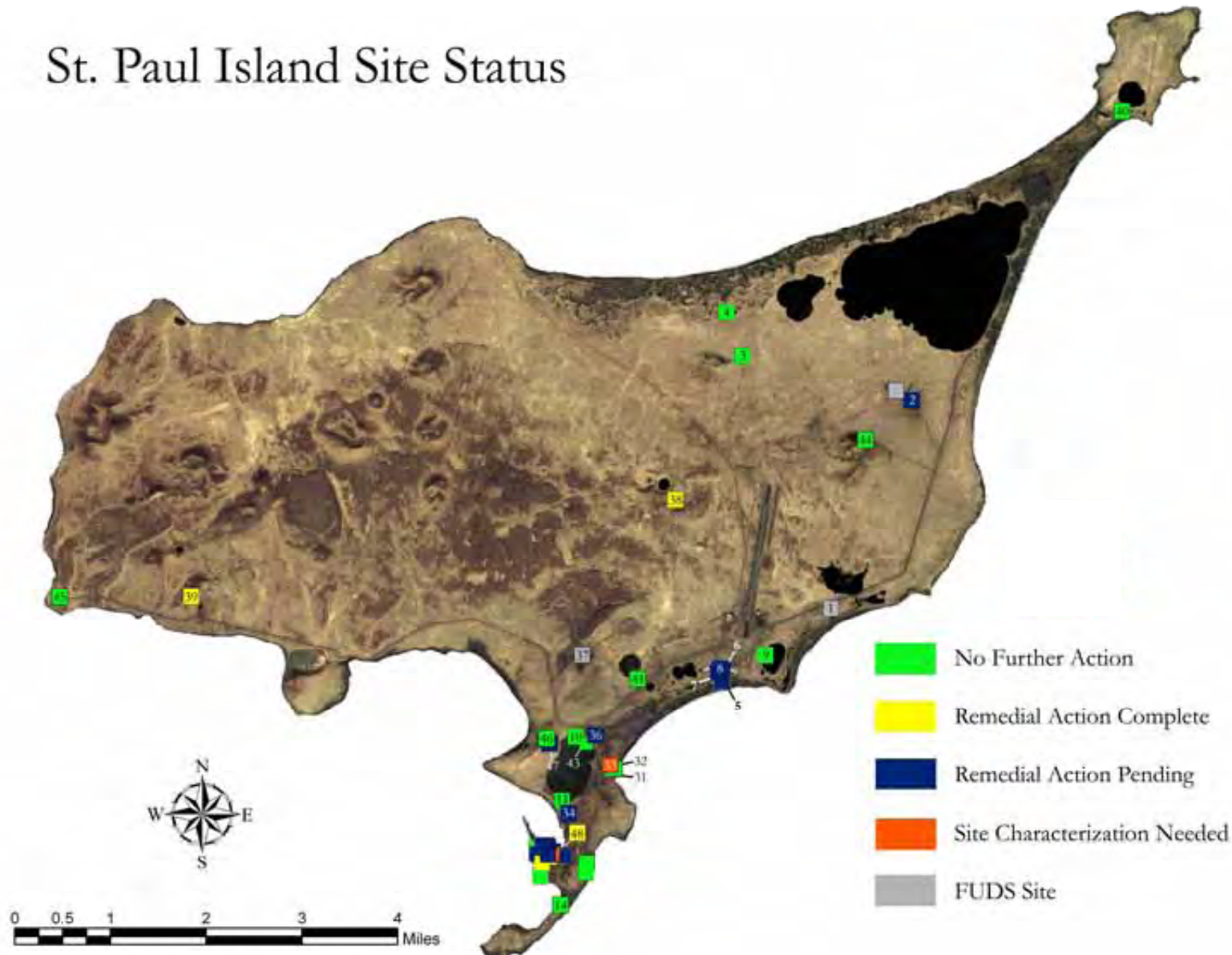


# St. George Village Site Status

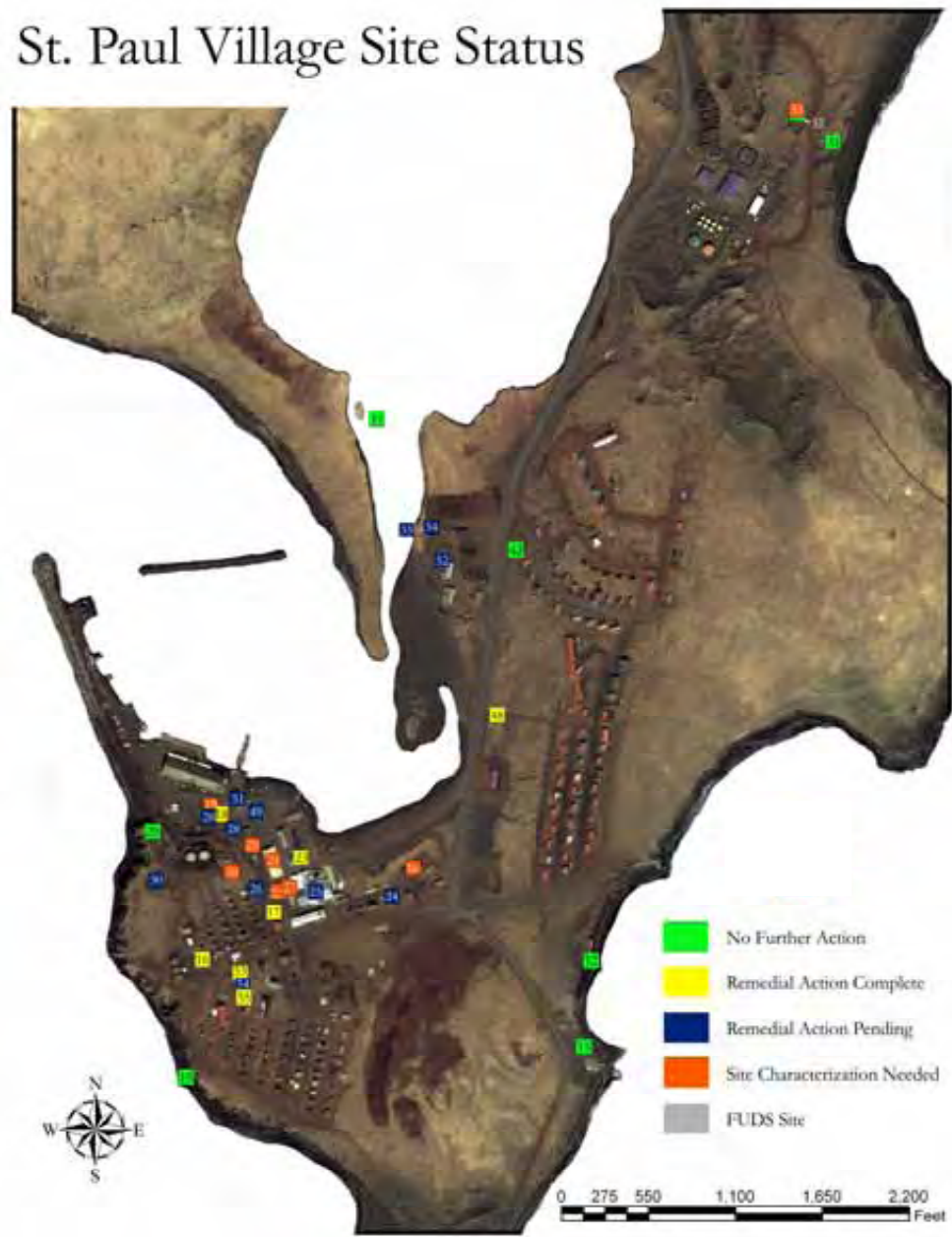




# St. Paul Island Site Status



# St. Paul Village Site Status



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# St. George Progress - 2002

- **Installed 5 New Monitoring Wells**
- **1 Round of Monitoring Well Sampling**
- **Test Pits and Sampling at TPA 19 - Old Carpenter Shop**
- **Final Characterization Reports for TPA 19 – Old Carpenter Shop and TPA 23 – Inactive Diesel Tank Farm**
- **Draft Characterization Reports for TPA's 1, 2, and 3 – Oceanfront Sites, TPA 7 – Ballfield/Landfill, TPA 18 – Former Fuel Storage Area**





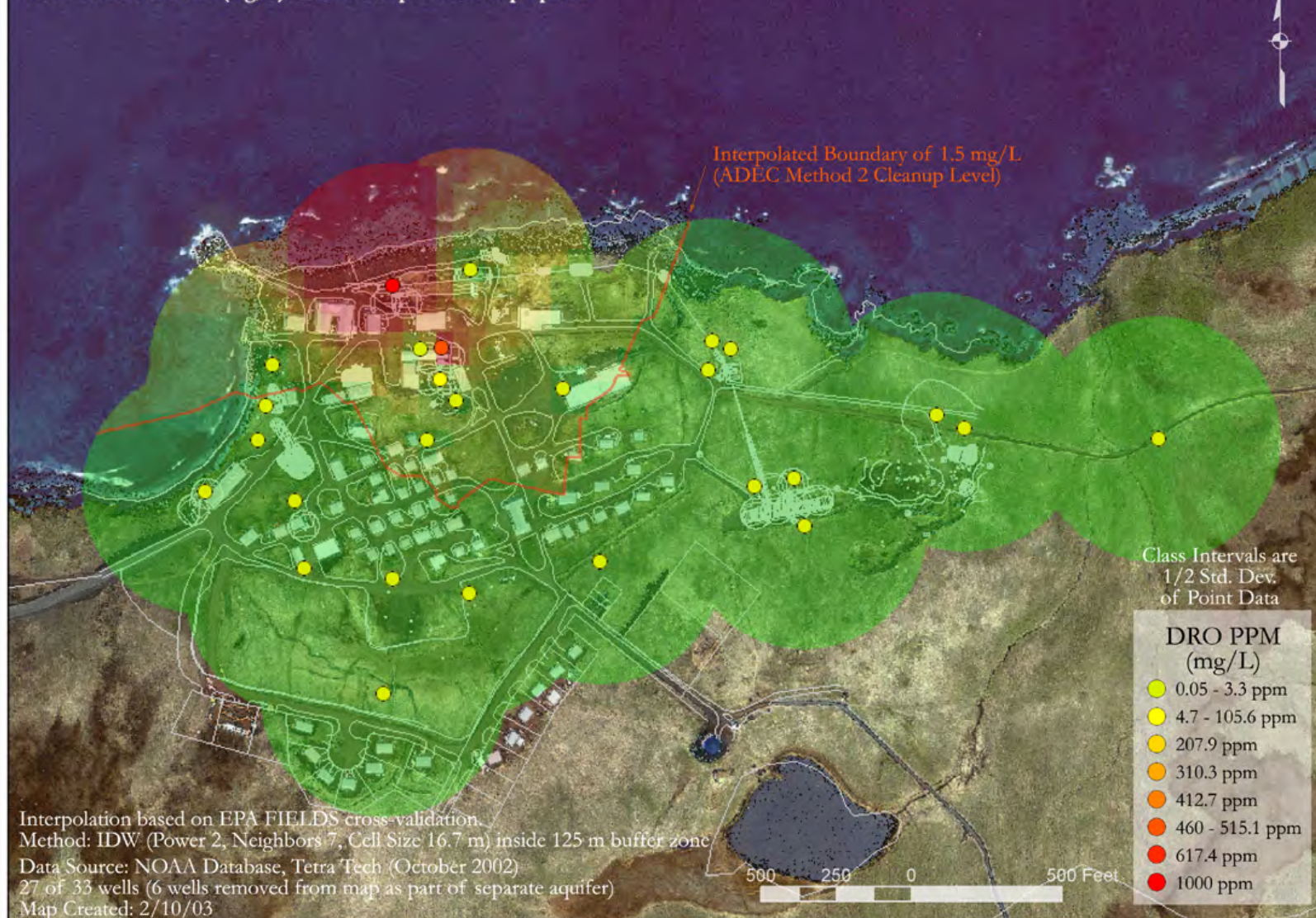


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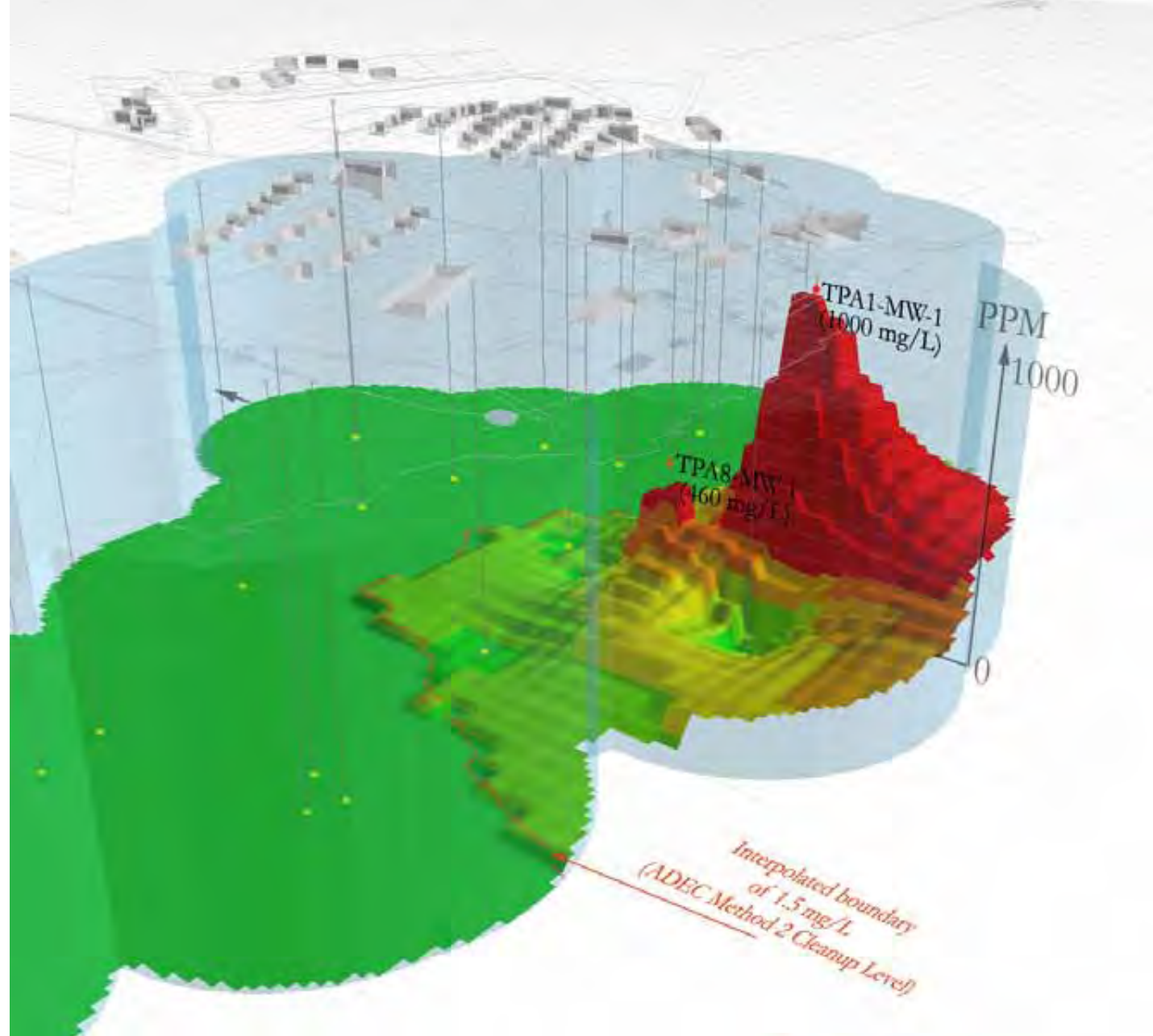


# Diesel Range Organics (\*DRO) in Groundwater, St. George, Alaska

\*concentration in PPM (mg/L) rounded for presentation purposes



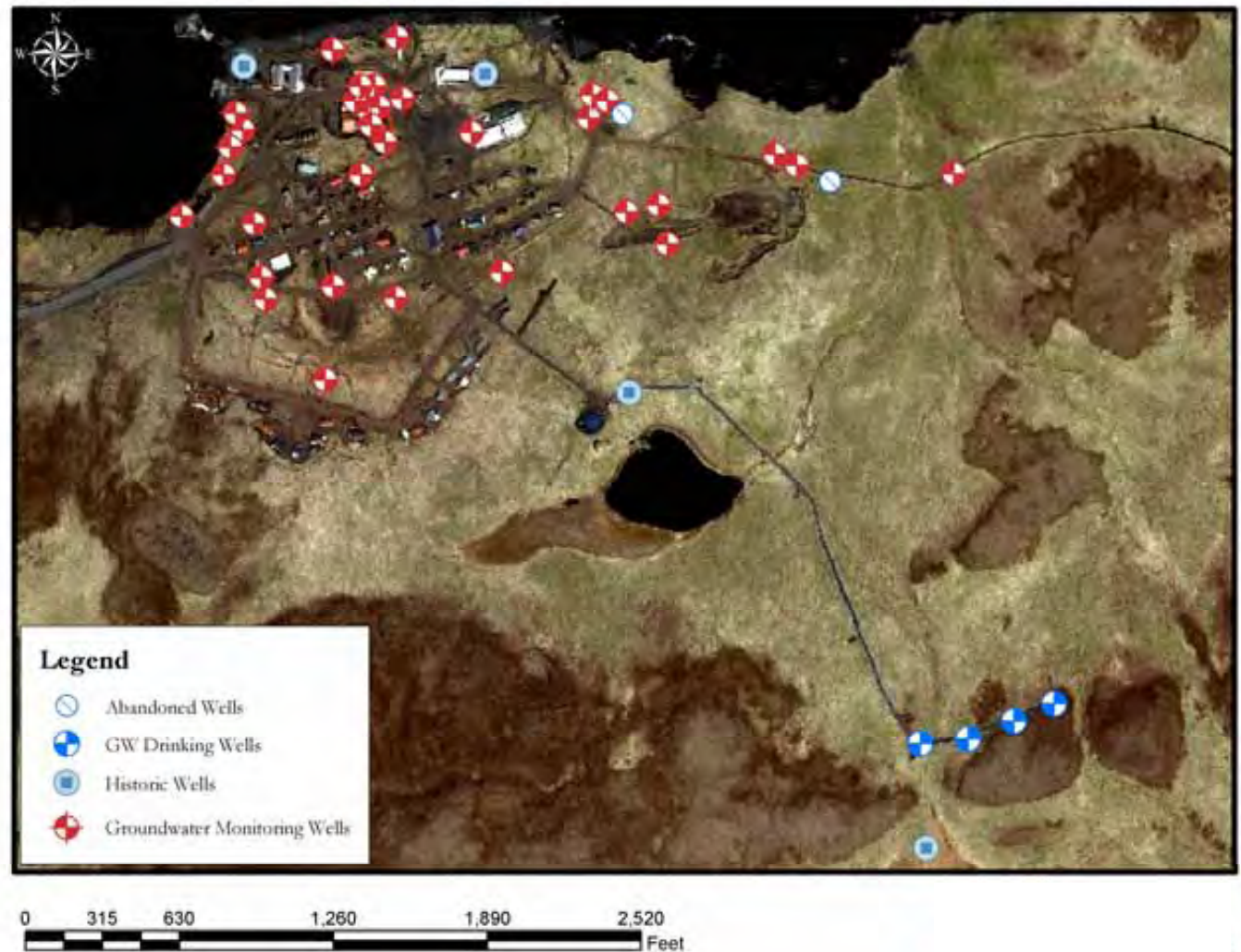
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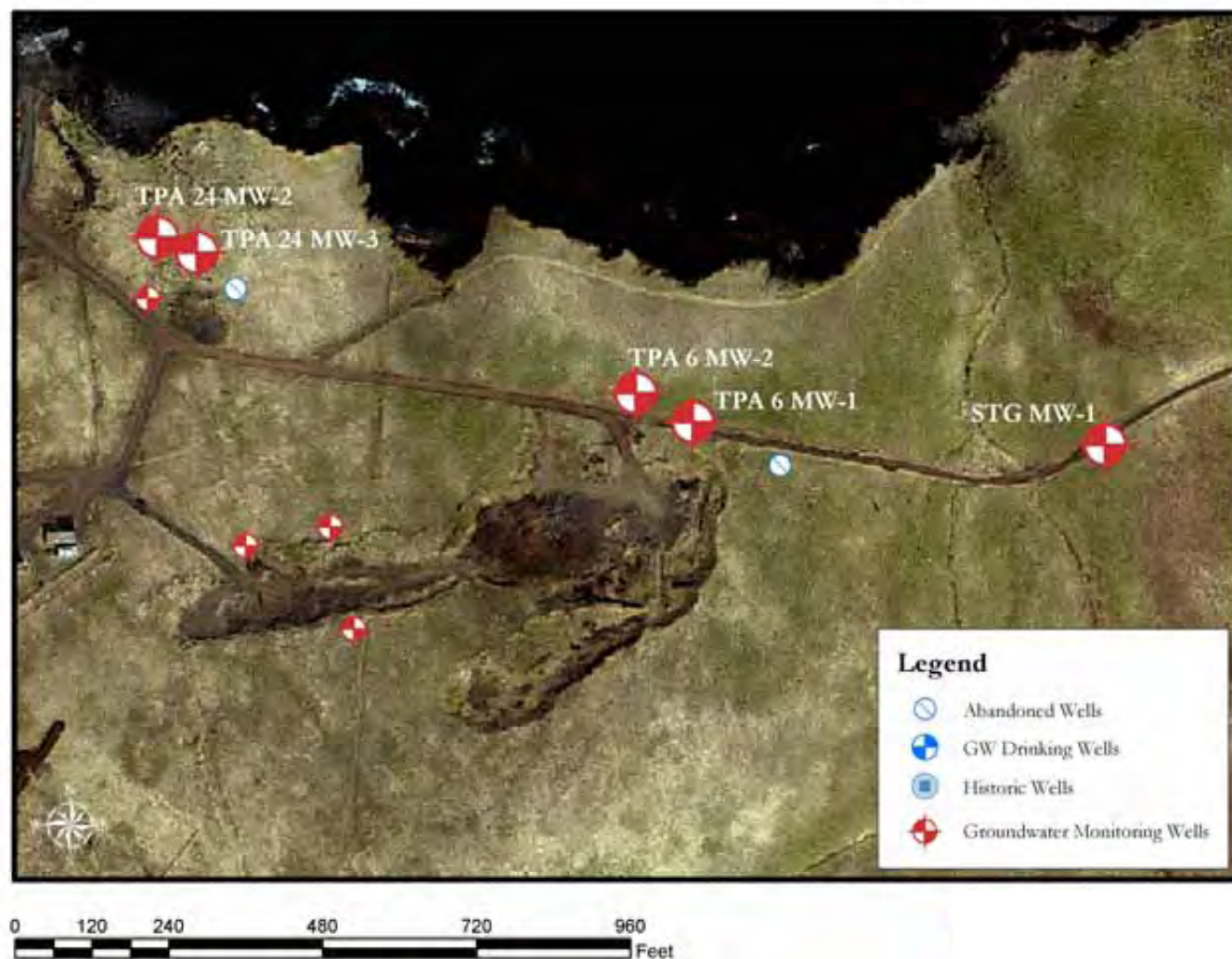
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# St. George Village Groundwater Well Network



# New Groundwater Monitoring Wells



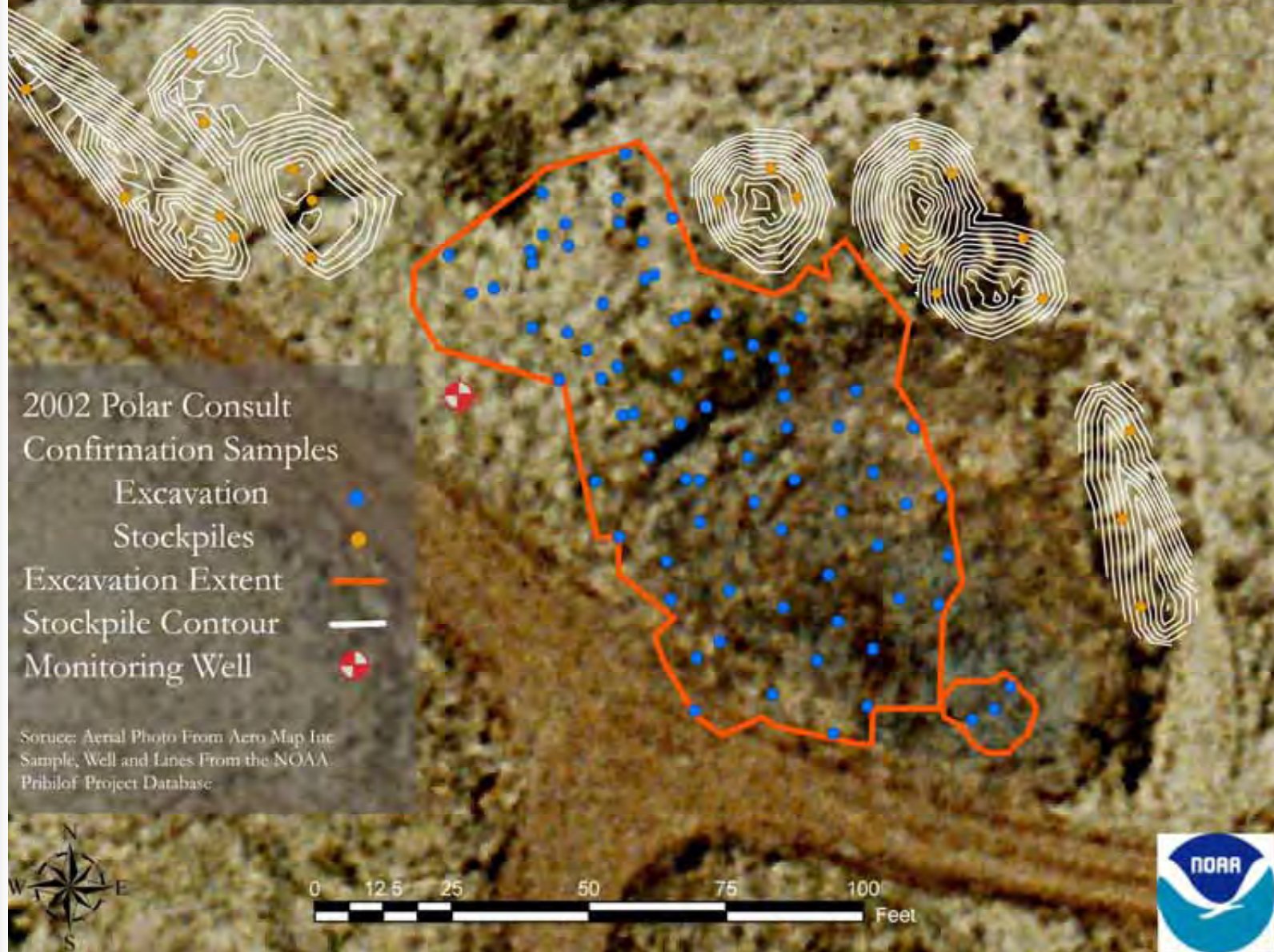


# St. George Progress – 2002

## (cont'd...)

- **TPA 24 – Inactive Gas Tank Farm: Finished cleanup**
- **TPA 22-1 – School UST: Finished cleanup**
- **TPA 6 – Open Pits: Finished cleanup**
- **TPA 19 – Old Carpenter Shop: Started cleanup**
- **ETC Soil Treatment: 4 cells treated**

# TPA 24 Inactive Gasoline Tank Farm





# TPA 22-1 St. George School UST



# TPA 6 Open Pits Site

1996 Hart Crowser

Test Pits



2002 Polar Consult

Test Pits



Excavation Extents

09/10/02 Coal Sub-Site



Crane Sub-Site



SE Sub-Site



Source: Aerial Photo from Aero Map Inc.  
Samples and Excavation Extents from  
NOAA Probiol Project Database



0 10 20 40 60 80 Feet



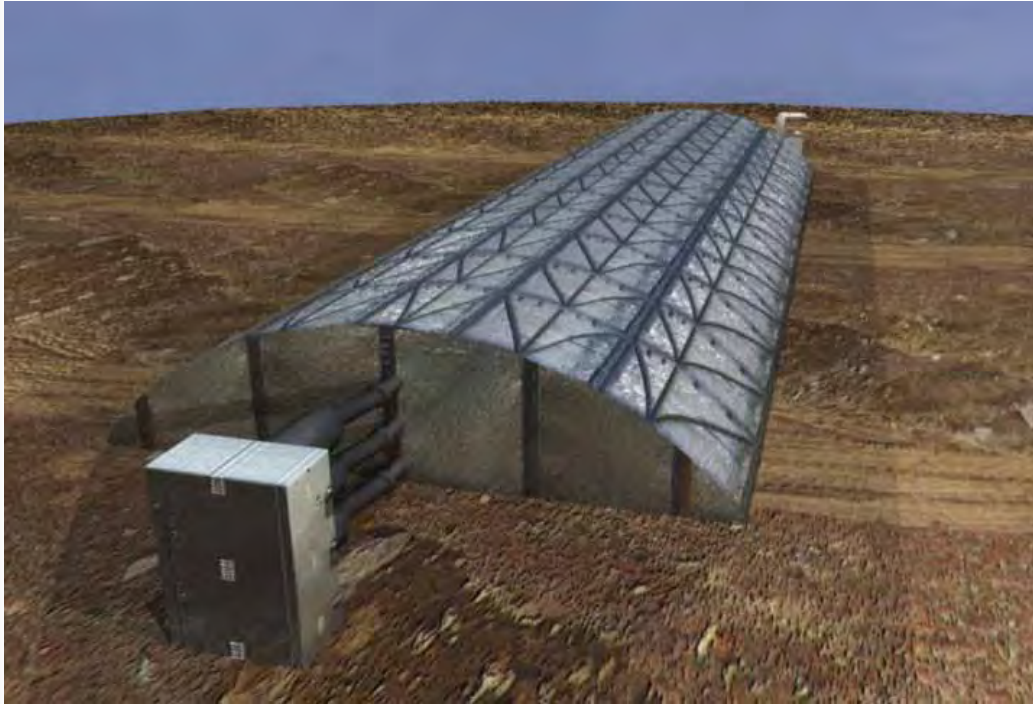


# TPA 19 Old Carpenter Shop





# Enhanced Thermal Conduction



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# Project Innovations

- **GPS for surveying during characterization, cleanup, and historic preservation (cemetery surveys)**
- **GIS for data visualization**
- **Thin Layer Chromatography for Semi-Quantitative Analysis of Soil Samples for DRO and RRO**
- **Soil-gas analyses to locate GRO and DRO contamination in soil and groundwater**
- **Track-mounted Geoprobe rig for soil sampling and well installation**

# TLC – DCM Extraction

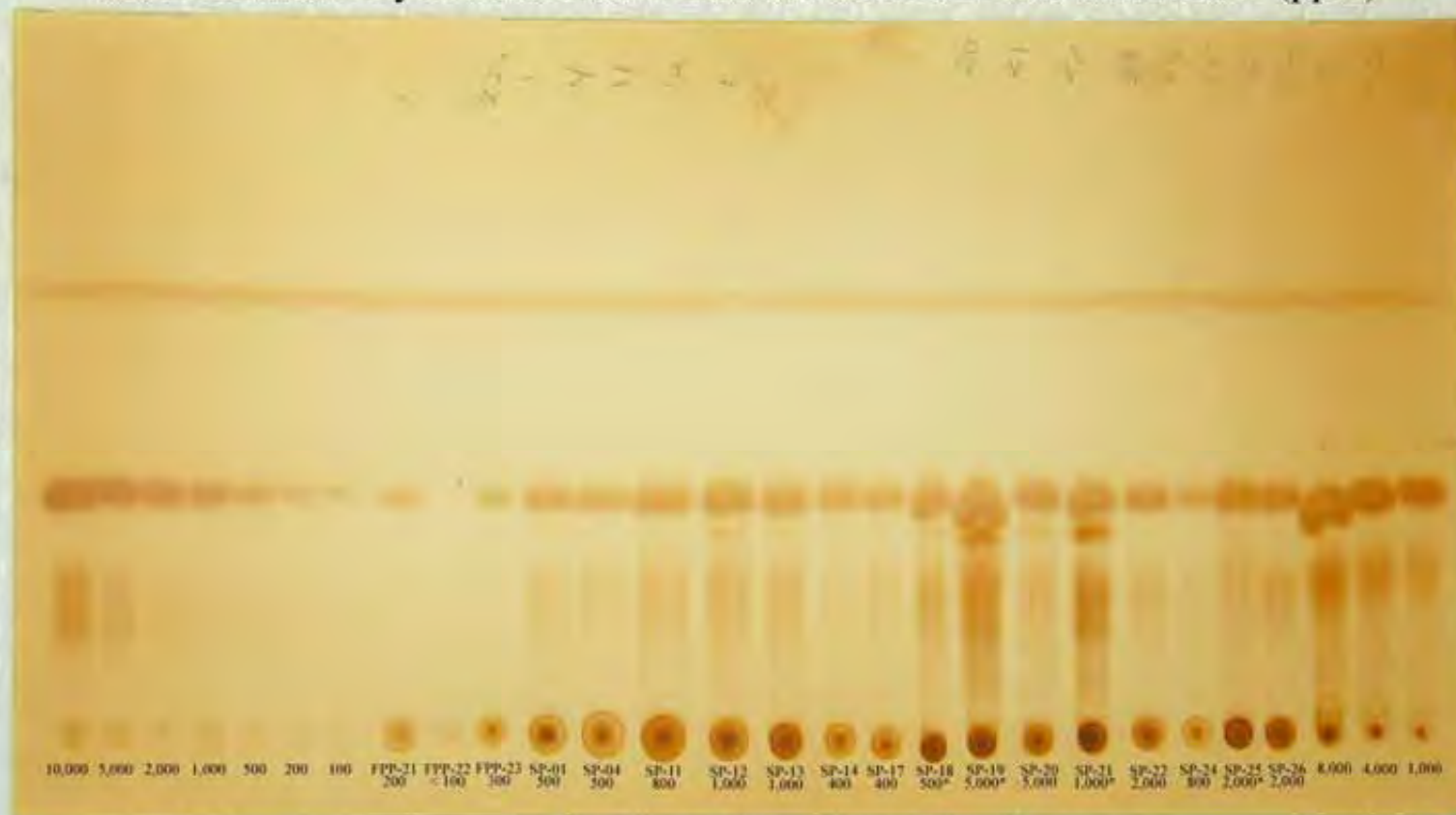


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# TLC – Developed Plate

Total Petroleum Hydrocarbon as #2 Diesel Fuel and Motor Oil 10/30W (ppm)



Standards -  
#2 Diesel Fuel

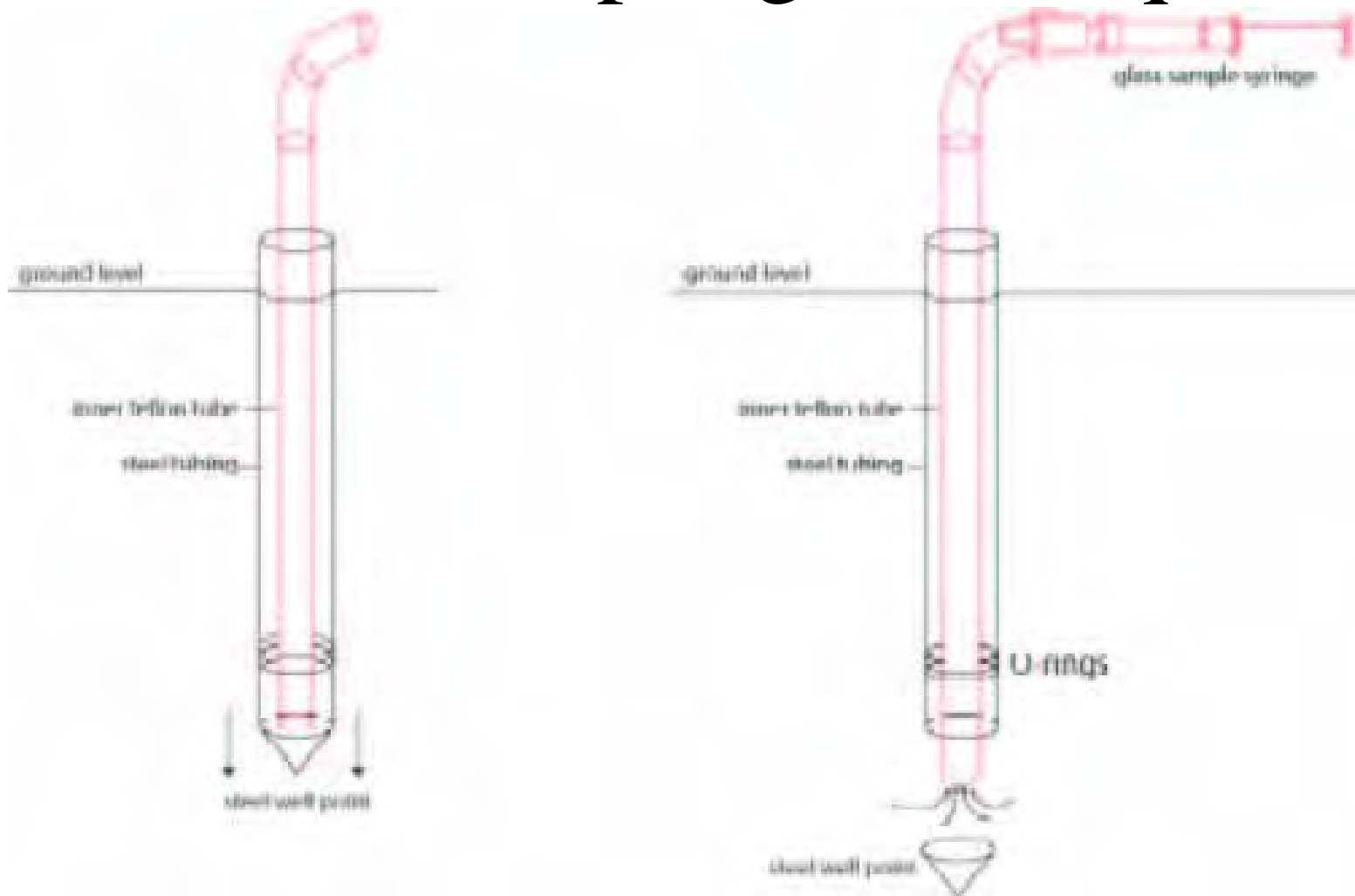
Samples - Former Power Plant confirmation  
and stockpile samples, 7/25/02 and 7/28/02  
(\* = possible motor oil contamination)

Standards -  
Motor Oil 10/30W



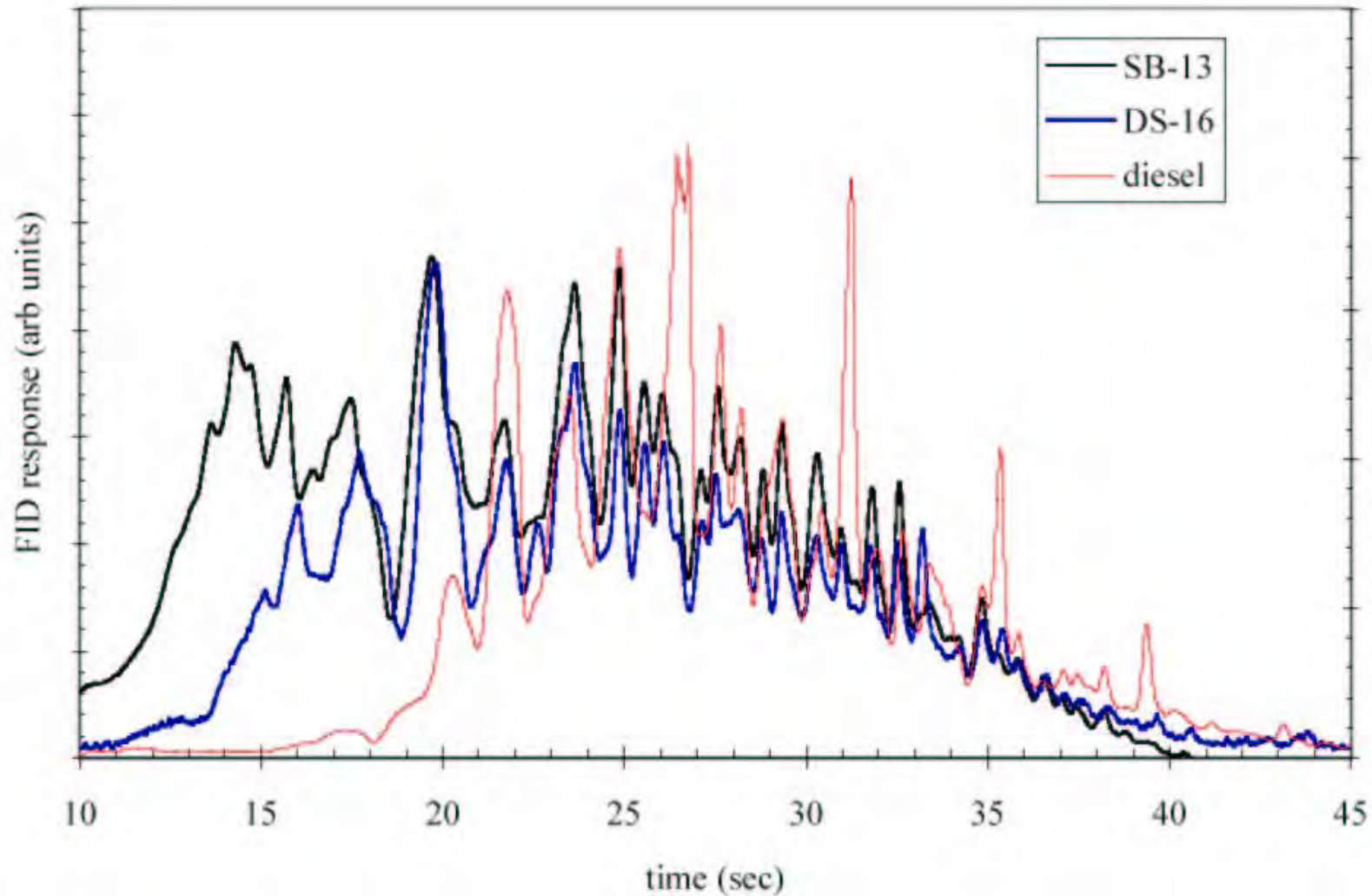
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# Soil-Gas Sampling Technique



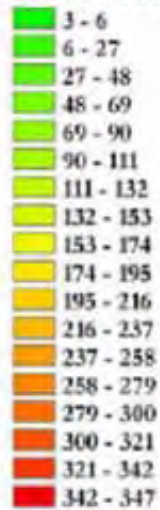


# Active Soil-Gas Results



**CO2 Data "Factor"**

3 - 6
6 - 27
27 - 48
48 - 69
69 - 90
90 - 111
111 - 132
132 - 153
153 - 174
174 - 195
195 - 216
216 - 237
237 - 258
258 - 279
279 - 300
300 - 321
321 - 342
342 - 347



# New Track-Mounted Geoprobe



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# Discussion